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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,974	05/30/2001	Robert M. Gallagher	65084-002	8612

26127 7590 10/20/2003

DYKEMA GOSSETT PLLC
39577 WOODWARD AVENUE
SUITE 300
BLOOMFIELD HILLS, MI 48304-5086

EXAMINER

LUK, EMMANUEL S.

ART UNIT PAPER NUMBER

1722

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/867,974

Applicant(s)

GALLAGHER, ROBERT M.

Examiner

Emmanuel S. Luk

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6, 10-12, 14, 16-17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vismara (5304050).

Vismara teaches a preforming device (1) that forms the carrier and conveyor (33), drive means, a forming device (41) and a source of polymer (44).

Vismara fails to teach a separate forming device from the polymer source and two sources of polymers.

Vismara teaches a forming device that forms the shape of the product, it is integral with source of polymer forming the layer of the product. It would have been obvious to one of ordinary skill in the art to combine the elements thereby eliminating an additional step in shaping the product.

In regards to the two polymer sources, Vismara teaches multiple injection points of the polymers (42; Fig. 4), it would have been obvious to one of ordinary skill in the art to have a second duplicate polymer source connected to be injected into the product for a multiplied effect of the layer. In re Harza, 124 USPQ 378 (CCPA 1960).

In regards to claims 2-6, 10, 11, 14, 17, 21 and 22, the polymers used to form the layers and carriers are intended use of the product by the apparatus. The carrier is part of the product since it is formed with the layered materials by the forming device into the product of the apparatus. Material or article worked upon does not limit apparatus claims and "expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

4. Claims 7-9, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vismara (5304050) as applied to claims 1-6, 10-12, 14, 16-17, 21 and 22 above, and further in view of Buckley et al (5364258).

Vismara fails to teach a robotic device with the conveyor and drive means.

Buckley teaches an apparatus for forming members that utilizes conveyors (10) and robotic means (74, 8, 128) that moves and places the product (Fig. 1). The use of robotic devices to place the product and to place materials within the product is known in the manufacturing arts.

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It would have been obvious to one of ordinary skill in the art to modify Vismara with robotic means as taught by Buckley because it allows for efficient production of the products.

5. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vismara (5304050) as applied to claims 1-6, 10-12, 14, 16-17, 21 and 22 above, and further in view of Oono et al (66270331 B1).

Vismara teaches the guide means (15) for the rigid material to the preform station while the undercarriage (33) supports the material. The guide means act to clamp the material (2).

Vismara fails to teach the carrier supported by an undercarriage that uses a vacuum or clamps.

In regards to claim 20, it would have been obvious to one of ordinary skill in the art to utilize clamps as ways to guide the carrier through the apparatus. Vismara already teaches the use of clamps for guiding the rigid material to the first station of the apparatus.

In regards to the vacuum, Oono teaches the use of a vacuum pump that is connected to an air exhaust hole (8) to secure the materials. It would have been obvious to one of ordinary skill in the art to modify Vismara with vacuums as taught by Oono because it allows for the material to be secured to the undercarriage.

6. Claims 23-38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vismara (5304050).

Vismara teaches a preforming device (1) that forms the carrier and conveyor (33), drive means, a forming device (41) and a source of polymer (44).

Vismara fails to teach a separate forming device from the polymer source and two sources of polymers.

Vismara teaches a forming device that forms the shape of the product, it is integral with source of polymer forming the layer of the product. It would have been obvious to one of ordinary skill in the art to combine the elements thereby eliminating an additional step in shaping the product.

In regards to the two polymer sources, Vismara teaches multiple injection points of the polymers (42; Fig. 4), it would have been obvious to one of ordinary skill in the art to have a second duplicate polymer source connected to be injected into the product for a multiplied effect of the layer. In re Harza, 124 USPQ 378 (CCPA 1960).

In regards to the layers, insert and the carrier, the polymers used to form the layers, insert and carriers are intended use of the product by the apparatus. The carrier is part of the product since it is formed with the layered materials by the forming device into the product of the apparatus. Material or article worked upon does not limit apparatus claims and "expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

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7. Claims 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vismara (5304050) as applied to claims 23-38 and 42 above, and further in view of Oono et al (66270331 B1).

Vismara teaches the guide means (15) for the rigid material to the preform station while the undercarriage (33) supports the material. The guide means act to clamp the material (2).

Vismara fails to teach the carrier supported by an undercarriage that uses a vacuum or clamps.

In regards to claim 20, it would have been obvious to one of ordinary skill in the art to utilize clamps as ways to guide the carrier through the apparatus. Vismara already teaches the use of clamps for guiding the rigid material to the first station of the apparatus.

In regards to the vacuum, Oono teaches the use of a vacuum pump that is connected to an air exhaust hole (8) to secure the materials. It would have been obvious to one of ordinary skill in the art to modify Vismara with vacuums as taught by Oono because it allows for the material to be secured to the undercarriage.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yang et al and Shinada et al.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (703) 305-1558. The examiner can normally be reached on Monday through Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on (703) 308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

E.L.


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700